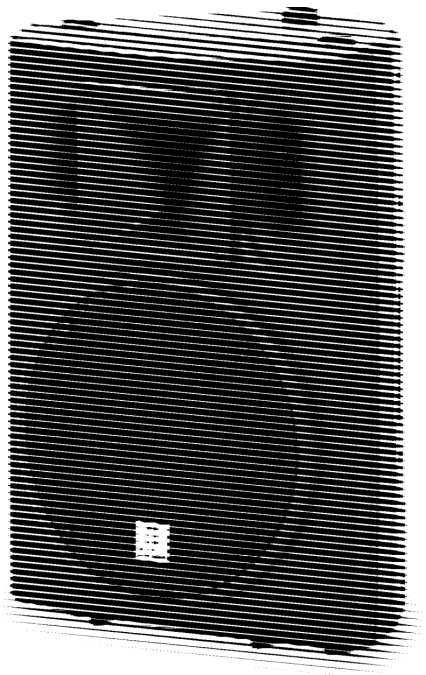

the box pro

PA302 A

active 2 way full-range speaker

th•mann
MUSIC IS OUR PASSION

user manual

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1 General notes

This user manual contains important information on safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to other users, be sure that they also receive this manual.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

Symbols and signal words

This section provides an overview of the symbols and signal words used in this user manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.

Warning signs	Type of danger
	Warning – danger zone.

2 Safety instructions

Intended use

This device is intended to be used in a sound reinforcement system. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.

DANGER!

Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.

DANGER!

Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.

CAUTION!

Possible hearing damage

The device can produce volume levels that may cause temporary or permanent hearing impairment. Over an extended period of time, even levels that seem to be uncritical can cause hearing damage.

Decrease the volume level immediately if you experience ringing in your ears or hearing impairment. If this is not possible, keep a greater distance or use sufficient ear protectors.

NOTICE!

Risk of fire

Do not block areas of ventilation. Do not install the device near any direct heat source. Keep the device away from naked flames.

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

3 Features

Special features of this active 2-way full-range speaker box:

- 1 × 12" woofer
- 1 × 44 mm titanium driver (50° … 100° × 55°)
- Output power 300 W (bass) + 100 W (tweeter)
- 2-band tone stack
- XLR in and output
- Switchable low cut @ 120 Hz
- Tripod mounting flange
- Monitor feet supplied for use as floor monitor

4 Installation

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.

NOTICE!

Possible property damage by magnetic fields

Loudspeakers produce a static magnetic field. Therefore, maintain an appropriate distance to devices that can be adversely affected or damaged by an external magnetic field.

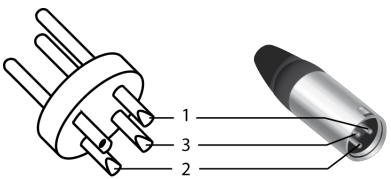
4.1 Pin assignment

You can use XLR plugs with balanced or unbalanced wiring. In the following, we will give you an overview of the various options.

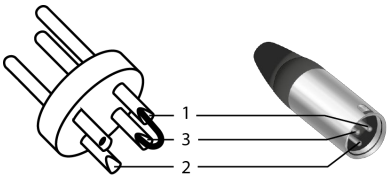
XLR connections for signal in and outputs

XLR mounting sockets serve as signal inputs. XLR mounting plugs provide the output signals. Drawing and table indicate the XLR pin assignment.

Balanced wiring:



1	Ground, shielding
2	Positive signal (+)
3	Negative signal (–)



Unbalanced wiring:

1	Ground, shielding
2	Signal
3	Bridged to pin 1

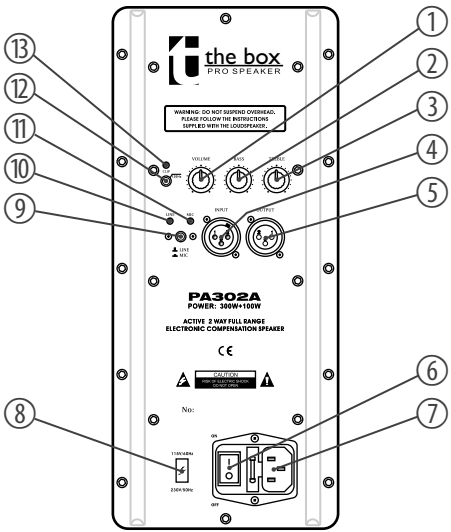
4.2 Tips on handling speakers

We recommend you to set up the speakers in a way, that the sound signals can reach the audience unobstructedly. It will often be helpful to mount the speakers on tripods. Thus, the sound will be evenly spread with maximum range throughout the audience area.

Always use high grade cable to connect your equipment. Otherwise you won't reach maximum sound quality.

If you notice distortion during operation, the active speaker is overloaded. This may permanently damage the device. Always reduce the volume as soon as you hear distortion.

5 Connections and operating elements



1	**VOLUME** Volume control. Turn this knob clockwise to increase the volume. Turn it counter-clockwise to reduce the volume.
2	**BASS** Bass control. Turn this knob clockwise to increase the low frequencies. Turn it counter-clockwise to attenuate them.
3	**TREBLE** Treble control. Turn this knob clockwise to increase the high frequencies. Turn it counter-clockwise to attenuate them.
4	**INPUT** An XLR mounting socket servers as signal input with switchable sensitivity.
5	**OUTPUT** An XLR mounting plug servers as line out to connect further active speakers.
6	**ON/OFF** Use the mains switch to turn the unit on or off.

7	IEC chassis connector for operating voltage supply with fuse holder.
8	**115V/60Hz — 230V/50Hz** Mains voltage selector. Before switching the unit on, make sure this selector is set correctly for the actual supply voltage at the operating location!
9	**LINE/MIC** Push button to select the input sensitivity (line or microphone level). Press the button with a suitable pointed object, such as a ballpoint pen.
10	LED **LINE** This LED lights up if the input sensitivity is set to LINE (line level).
11	LED **MIC** This LED lights up if the input sensitivity is set to MIC (microphone level).

12	**120Hz** Use this switch to attenuate the low frequencies below 120 Hz. The function reduces the transmission of impact noise and so increases the woofers life time.
13	**CLIP** Indicates clipping. If this LED flickers or lights up, the input level is too high.

6 Technical specifications

System	Active 2-way full-range speaker with built-in crossover
Speakers	1 × 12" mid / bass speaker 44 mm titanium driver, dispersion 50 to 100° × 55°
Connections	XLR input XLR output
Power consumption	150 W
Output power	Woofer: 300 W Tweeter: 100 W
Frequency response	50 Hz … 18 kHz (–3 dB) 40 Hz … 18 kHz (–10 dB)
Sound pressure level (1 m)	120 dB

Level adaptation	Bass: ± 12 dB, 100 Hz Treble: ± 12 dB, 10 kHz
THD	Line: 0.02 % Microphone: 0.04 %
Load impedance	Woofer: 8 Ω Tweeter: 8 Ω
Input impedance	balanced: 20 kΩ unbalanced: 10 kΩ
Operating voltage supply	AC 230 V ~ , 50 Hz AC 115 V ~ , 60 Hz
Housing	Polypropylene, trapezoid, black
Dimensions (W × H × D)	415 mm × 600 mm × 390 mm
Weight	23 kg

7 Protecting the environment

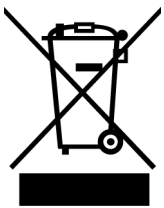
Disposal of the packaging material

For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device



This device is subject to the European directive 2002/96/EC.

Do not dispose of the device with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.